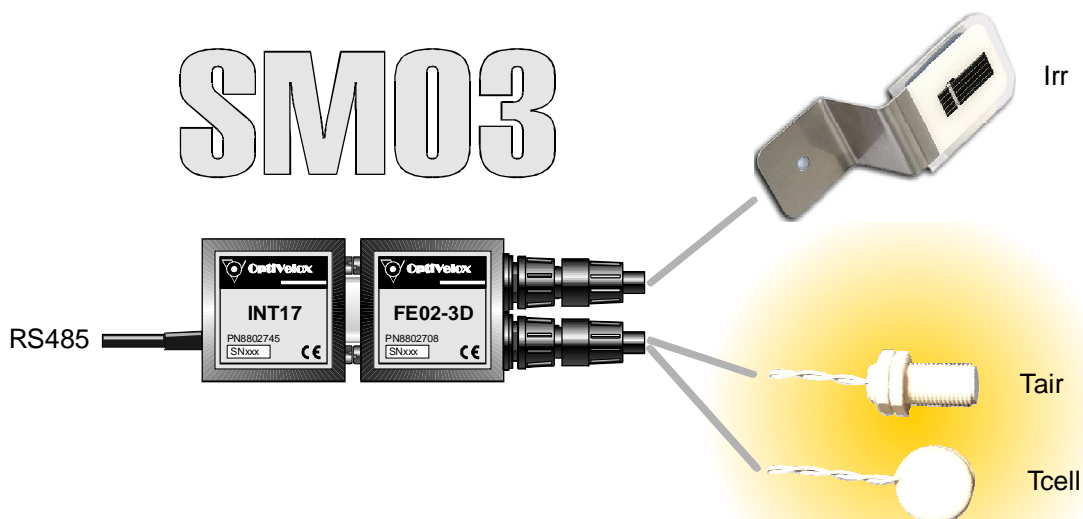


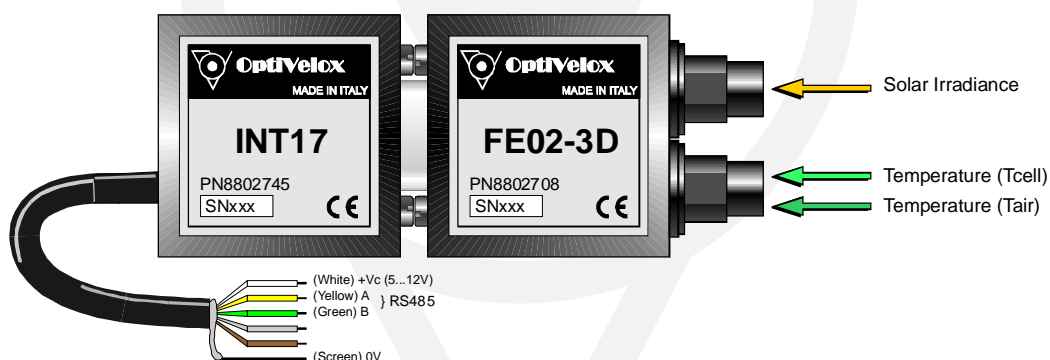
# Meteo Station SM03



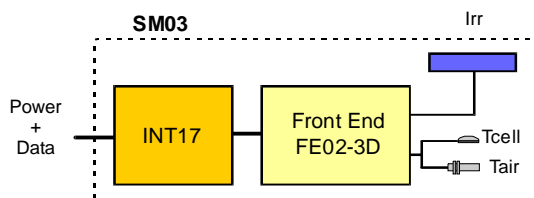
The meteo station SM03 is a device designed to measure the main parameters needed for the analysis of the environmental performance of a photovoltaic system. In particular, SM03 measures the following physical quantities: solar irradiance, air temperature and cell temperature.

In accordance to CEI 82-25 guide, the solar irradiation is detected by a silicon solar cell. The cell is also temperature-compensated in order to allow long exposure times without compromising the precision of measurement.

The temperatures are detected by means of high quality platinum resistance sensors; the probe for the cell temperature is provided with a plate coated with thermally conductive rubber.



The meteo station is provided with a standard RS485 communication interface and can be directly connected to any SmartDisplay device.



Code	Part	Description
8802795	SM03	Meteo Station with RS485 connection (sensors included)
8802745	INT17	Interface RS485/FE0X
8802708	FE02-3D	Front End acquisition device
8802405	-	Double temperature probe (Tcell, Tair)
8802406	-	Irradiance sensor (Irr)

## Technical specifications

### SOLAR IRRADIANCE MEASUREMENT

Type of sensor: Poly-Si cell, temperature compensated  
 Operating range: 0...1500 W/m<sup>2</sup>, -20...70°C  
 Resolution: 0.1 W/m<sup>2</sup>  
 Accuracy: ±(5% rdg + 20 dgt)  
 Cable length: 1.4 m

### TEMPERATURE MEASUREMENT

Type of sensor: RTD Pt1000, Class 1/3B (DIN/IEC751)  
 Operating range: -50...150°C (Tcell)  
 Operating range: -20...50°C (Tair)  
 Resolution: 0.01°C  
 Accuracy: ±(0.2% rdg + 15 dgt)  
 Cable length: 1.4 m

### DATA OUTPUT

RS485 interface

### POWER SUPPLY

4.5...13.2 Vdc  
 5 mA (typ)

### TEMPERATURE RANGE\*

-10°...55°C working (RH max 85% at 25°C)  
 -20°...60°C storage

### DEGREE OF PROTECTION

IP65

### DIMENSIONS \*

85 mm x 40 mm x 20 mm (excluding connectors)

### WEIGHT \*

~100 g

Note:

\* assembling INT17+FE02-3D